

A DEVICE AND METHOD FOR MANAGING FAULT DETECTION AND
FAULT ISOLATION IN VOICE AND DATA NETWORKS

ABSTRACT OF THE DISCLOSURE

5 The present invention provides a device and method for managing fault detection
and isolation in voice and data networks. Specifically, the present invention is a device
and method for fault detection and fault isolation that can be used to validate connectivity
of a central site to a number of connected client devices. The present invention operates
stage by stage, working from the central site back to a connected client device. The
10 present invention can be controlled from a central maintenance station and as such does
not require direct user enabling. In one embodiment, the present invention provides an
intelligent device (e.g., an intelligent data concentrator) for coupling an electronic device to
a network comprising a first interface for communicatively coupling the intelligent device
to the network and a second interface for communicatively coupling the intelligent device
15 to a plurality of client devices such that the client devices are communicatively coupled to
the network. The intelligent device also comprises means for processing and interpreting
data coupled to the first interface, and fault detection means coupled to the means for
processing and interpreting data, wherein the fault detection means performs fault
detection in the network. In one embodiment, the intelligent device operates in
20 conjunction with a central control site in performing fault detection.